

Affordability Crisis: A Mirror of Inequality

The U.S. housing affordability crisis is undeniable. In October 2022, the median house price rose to \$493,000, double the price tag a decade ago.¹ Meanwhile, renters face further challenges to remain afloat; 40% of renter households in the U.S. are cost burdened, spending over 30% of their income on housing from 2017-2021.² Correspondingly, the Housing Affordability Index plummeted 29% last year, to record lows since 2007.³ While the numbers are frightening, the reason remains ambiguous. Some blame insufficient supply stemming from the Great Recession and social movements such as NIMBY for fueling high prices. Others posit that recent inflation and soaring mortgage rates of 7% have hindered buyers' ability to afford a down payment and mortgage. What is the origin of this affordability crisis? Why is unaffordability inexorable in the current housing market? How should governments and people respond?

Overall Supply is not the Issue

Senses of shortage aside, the U.S. population⁴ and number of housing units⁵ demonstrate the existent supply trend. The average house per person ratio can be determined by dividing housing units by population: if this ratio is greater, the theoretical relative supply is greater, and vice versa. In data taken from yearly population and the Q4 reported number of housing units between 2000-2022, the following trend is observed:

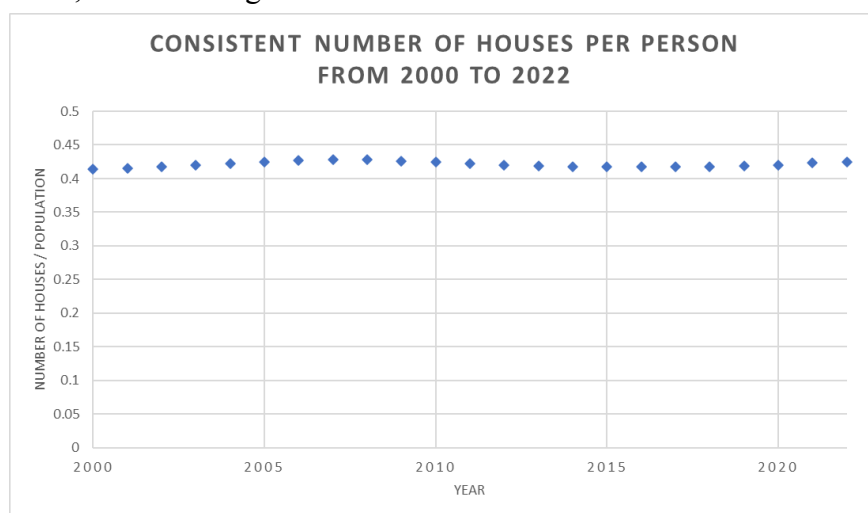


Figure 1: Relative supply of housing for the population is consistent with historical ratios (Data from MacroTrends and FRED **Note the 2022 data used Q3 housing unit count)

¹ “Average & Median Sale Price for a New Home,” Average and Median Cost for A New Home in The United States, FedPrimeRate.com, December 25, 2022. http://www.fedprimerate.com/new_home_sales_price_history.htm.

² US Census Bureau, “More than 19 Million Renters Burdened by Housing Costs,” Census.gov, December 8, 2022, <https://www.census.gov/newsroom/press-releases/2022/renters-burdened-by-housing-costs.html>.

³ Matt Phillips, “Housing Affordability Collapses at Fastest Clip on Record,” Axios, June 7, 2022, <https://www.axios.com/2022/06/07/housing-affordability-collapse>.

⁴ “U.S. Population 1950-2023,” MacroTrends, accessed December 20, 2023, <https://www.macrotrends.net/countries/USA/united-states/population>.

⁵ “Housing Inventory Estimate: Total Housing Units in the United States,” FRED, November 2, 2022, <https://fred.stlouisfed.org/series/ETOTALUSQ176N>.

Relative supply has not decreased; from 2000 to 2022, the ratio remained between 0.41 and 0.43 house per person. In fact, the 2022 value of 0.424 has been the highest since 2009, directly contradicting claims that limited supply incites the affordability crisis. If general supply dictated unaffordability, affordability would have been more severe in the past decade than today.

Concerning Dynamics of Ownership

This seemingly contradictory supply ratio warrants an examination of its dynamics. The distribution of housing wealth in 2010-2020 displays an increase in housing market share dominated by higher income families. In 2020, higher income families owned a staggering 42.6% of the total owner-occupied housing wealth, up from 28.0% in 2010. Meanwhile, middle income families who occupied 43.8% in 2010 held only 37.5% in 2020, while lower income families lost 9% of the housing market in a decade.⁶ Intuitively, these dynamics generate a shortage: if higher income families own an increasing ratio of houses, lower and middle income families face a relative lack of supply.

This phenomenon is further visible in the record-low first-time buyer percentage—26% in 2022.⁷ If we ran a simulation of homeownership with an initial population of one million using the current 66.0% homeownership⁸, 0.42 house per person, 0.5% population growth⁹, and assume that homebuyers purchase one additional house in a given year, the 26% first time homebuyer percentage would negatively influence homeownership and distribution.

⁶ Scholastica Cororaton, “Distribution of Housing Wealth across Income Groups from 2010–2020,” www.nar.realtor, March 11, 2022, <https://www.nar.realtor/blogs/economists-outlook/distribution-of-housing-wealth-across-income-groups-from-2010-2020>.

⁷ “Highlights from the Profile of Home Buyers and Sellers,” www.nar.realtor, October 31, 2016, <https://www.nar.realtor/research-and-statistics/research-reports/highlights-from-the-profile-of-home-buyers-and-sellers>.

⁸ “Quarterly Residential Vacancies and Homeownership, Third Quarter 2022,” census.gov, November 2, 2022, <https://usatrade.census.gov/housing/hvs/files/currenthvspress.pdf>.

⁹ “U.S. Population 1950-2023,” MacroTrends, accessed December 27, 2023, <https://www.macrotrends.net/countries/USA/united-states/population>.

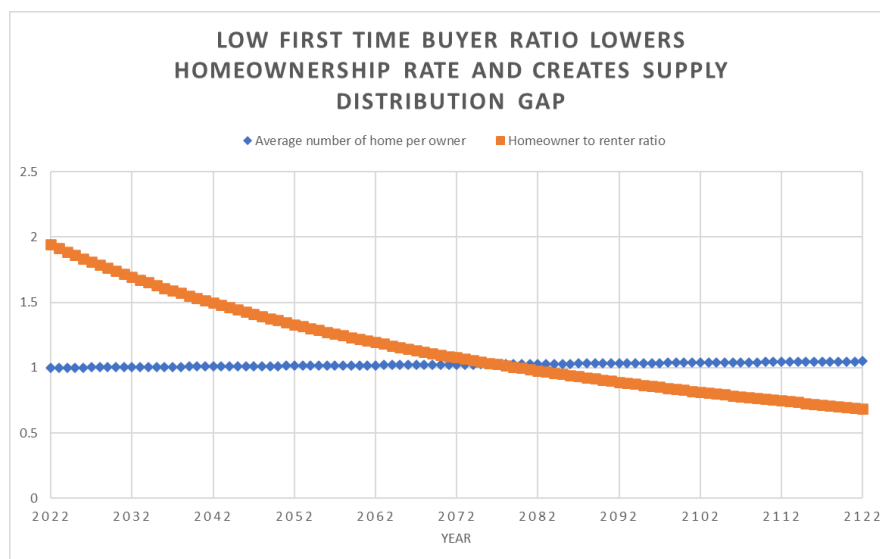


Figure 2: Simulation of the impact of 26% first time homebuyer ratio (Data from National Association of Realtors, U.S. Census Bureau, and MacroTrends)

The homeownership rate would decrease by 3.1% in the first decade, lengthening to 25.2% in a century. The average number of homes occupied by homeowners would increase, forging a greater gap between homeowners and renters. Worse yet, if the 26% ratio decreases, homeownership and distribution are more severely affected. This housing distribution is dangerous; while supply is constant, homes tend to be purchased by previous homeowners, resulting in greater housing inequality.

“Affordable” is not Attainable

The National Association of Realtors quantifies affordability using the median income family’s capability to qualify for a mortgage on a median-priced home.¹⁰ However, the actual ability of the median person to buy in “affordable” years is not correlated. By examining the change in affordability along with homeownership, periods of higher affordability correspond to lower levels of homeownership. For instance, 2011-2018 marked very high HOAM Index affordability, yet simultaneous low homeownership.¹¹ This index fails to include the capacity of median buyers to possess the financial security and competitiveness to buy a house. Affordable years have low mortgage rates, yet low rates are a response to hard economic times, which the median buyer is living through. However, higher income individuals can take advantage of low rates to invest without worrying about their livelihood.

Unaffordability exists for middle and lower income buyers regardless of mortgage rates; while 7% result in significantly higher interest paid on the loan, curbing inflation is actually

¹⁰ “Methodology: Housing Affordability Index,” [www.nar.realtor](https://www.nar.realtor/research-and-statistics/housing-statistics/housing-affordability-index/methodology), December 28, 2011, <https://www.nar.realtor/research-and-statistics/housing-statistics/housing-affordability-index/methodology>.

¹¹ “Home Ownership Affordability Monitor,” Federal Reserve Bank of Atlanta, November 28, 2022, <https://www.atlantafed.org/center-for-housing-and-policy/data-and-tools/home-ownership-affordability-monitor>.

beneficial to homebuyers as savings will depreciate slower. Lower rates provide lower prices, yet induce a wider future gap, as observed in the Great Recession, when wealthy families benefited disproportionately.

Inequality creates more Inequality

The housing market is particularly vulnerable to inequality as housing is a necessity and an investment. Unlike goods that are solely necessities, housing can generate wealth by appreciation and be inherited. Likewise, housing is distinct from pure investments since it has direct living implications.

The investment-like qualities of the housing market favors earlier buyers, forging a generational gap. Firstly, median income¹² covers an increasingly smaller percentage of the median home price¹³. The graphed trendline confirms a depreciation of 0.24% yearly of median incomes to median house price. This gives a “first come, first served” advantage to families who were capable of purchasing earlier, since the downpayment saving period was significantly shorter. Second, yearly house price appreciation¹⁴ consistently surpasses inflation¹⁵. Between 2010-2022, after the recession, annual home appreciation averaged 5.92% and inflation 1.97%. This widens homeownership inequality; while owners can surpass inflation to generate more wealth, renters become increasingly burdened by rising rent prices and other necessities, making down payment saving less obtainable. This trend is exacerbated in years of higher inflation and high mortgage rates: since pre-pandemic, the down payment saving time has doubled for the median person, standing at 22.6 years for a 20% downpayment.¹⁶ Next, owning a first home provides leverage to repeat buying for investment. The lending system offers better interest rates, more flexible options, and easier approval for mortgages to customers with higher credit scores, which first time buyers often lack.¹⁷ Finally, the housing market is obliterated by major changes in the economy, which tend to favor wealthier early buyers who have the finances to invest. One example is the aftermath of the Great Recession, when the Fed slashed interest rates to improve liquidity. Only the top quintile of families had a positive change in inflation adjusted wealth following the crisis¹⁸

¹² “Average & Median Sale Price for a New Home,” Average and Median Cost for A New Home in The United States, FedPrimeRate.com, December 25, 2022.

¹³ “Median Household Income U.S. 2021,” Statista, October 10, 2022, <https://www.statista.com/statistics/200838/median-household-income-in-the-united-states/>.

¹⁴ “Median Sales Price of Houses Sold for the United States,” FRED, October 26, 2022, <https://fred.stlouisfed.org/series/MSPUS>.

¹⁵ “Inflation, Consumer Prices for the United States,” FRED, May 3, 2022, <https://fred.stlouisfed.org/series/FPCPITOTLZGUSA>.

¹⁶ Dan Weil, “Housing Blues Continue to Play: Unaffordable Mortgages,” TheStreet (TheStreet, July 20, 2022), <https://www.thestreet.com/personal-finance/first-time-home-buyers-affordability>.

¹⁷ LaToya Irby, “9 Benefits of Having Good Credit,” The Balance, January 5, 2023, <https://www.thebalancemoney.com/having-good-credit-score-960528>.

¹⁸ Timothy Smeeding, 2012, “Income Wealth and Debt and the Great Recession,” Stanford, CA: Stanford Center on Poverty and Inequality.

Housing as a necessity further escalates unaffordability through dictating socio-economic status. The investment-like nature of housing naturally widens inequality within the housing market, but since the typical American has over 70% of their net worth in their primary residence, this phenomenon is reflected in society.¹⁹ Socio-economic inequality then affects housing as people with more socio-economic wealth are more able to purchase homes. This draws a positive feedback loop with housing unaffordability and inequality; each one equally exacerbates the other.

Solutions at all levels

Since unaffordability is primarily driven by timing, possible solutions should aim to balance wealth generation, promote first-time buying, and develop equality in times of crisis. Reducing general socio-economic inequality would alleviate housing unaffordability, but the solutions are less tangible.

The federal government should initiate creative credit programs and taxing. One beneficial program was the 2008 First-Time Homebuyer Credit, which gave new homebuyers a credit of \$7,500 to mitigate the great recession housing crisis. Although the program ended in 2010, a bill was proposed in 2021 to support new homebuyers with a \$15,000 tax credit. The federal government should begin by approving the bill to alleviate current first-time buying difficulties. Another idea is to boost early homeownership by creating a student loan bridge for new graduates. Adding an option to extend the six-month grace period if graduates purchase a house, and bridging the student loan onto mortgage repayment would assist younger graduates in purchasing their first home. Finally, tax deductions could be modified to support first-time buyers and lower/middle income families. One idea may be to add mortgage interest to standard deduction for principal homes; since lower/middle income first time buyers can't utilize itemized deduction, some tax burden can be alleviated.

Local and state governments should prioritize loosening zoning restrictions to accommodate duplexes, triplexes, and apartments in diverse neighborhoods. This would lower the cost of separate housing units, ensuring prices are more attainable for renters. The local government could also modify property taxes on additional homes. Assigning a higher assessment rate on additional homes increases property tax, lowering the incentive for wealthier people to occupy multiple homes while reducing the tax for single-property owners.

Individuals have little power to influence market realities, but homebuyers should save early to purchase sooner. Most homeowners will rationally continue capitalizing on housing as it generates personal wealth. However, rethinking how they can support positive change in ways

¹⁹ Financial Samurai, "Primary Residence Value as a Percentage of Net Worth Guide," Financial Samurai, November 5, 2022, <https://www.financialsamurai.com/primary-residence-value-as-a-percentage-of-net-worth-guide/>.

that affect them minimally—lowering rent increases for rental properties, supporting more inclusive zoning, and becoming educated on the situation—can initiate a small impact locally. While housing affordability is far from superficial, balancing housing inequality at all levels bolsters overall social equality, which fosters housing affordability in return.

Bibliography

- “Average & Median Sale Price for a New Home.” Average and Median Cost for A New Home in The United States. FedPrimeRate.com, December 25, 2022.
http://www.fedprimerate.com/new_home_sales_price_history.htm.
- Cororaton, Scholastica. “Distribution of Housing Wealth across Income Groups from 2010–2020.” www.nar.realtor, March 11, 2022.
<https://www.nar.realtor/blogs/economists-outlook/distribution-of-housing-wealth-across-income-groups-from-2010-2020>.
- Financial Samurai. “Primary Residence Value as a Percentage of Net Worth Guide.” Financial Samurai, November 5, 2022.
<https://www.financialsamurai.com/primary-residence-value-as-a-percentage-of-net-worth-guide/>.
- “Highlights from the Profile of Home Buyers and Sellers.” www.nar.realtor, October 31, 2016.
<https://www.nar.realtor/research-and-statistics/research-reports/highlights-from-the-profile-of-home-buyers-and-sellers>.
- “Home Ownership Affordability Monitor.” Federal Reserve Bank of Atlanta, November 28, 2022.
<https://www.atlantafed.org/center-for-housing-and-policy/data-and-tools/home-ownership-affordability-monitor>.
- “Housing Inventory Estimate: Total Housing Units in the United States.” FRED, November 2, 2022. <https://fred.stlouisfed.org/series/ETOTALUSQ176N>.
- “Inflation, Consumer Prices for the United States.” FRED, May 3, 2022.
<https://fred.stlouisfed.org/series/FPCPITOTLZGUSA>.
- Irby, LaToya. “9 Benefits of Having Good Credit.” The Balance, January 5, 2023.
<https://www.thebalancemoney.com/having-good-credit-score-960528>.
- “Median Household Income U.S. 2021.” Statista, October 10, 2022.
<https://www.statista.com/statistics/200838/median-household-income-in-the-united-states/>.
- “Median Sales Price of Houses Sold for the United States.” FRED, October 26, 2022.
<https://fred.stlouisfed.org/series/MSPUS>.

- “Methodology: Housing Affordability Index.” [www.nar.realtor](https://www.nar.realtor/research-and-statistics/housing-statistics/housing-affordability-index/methodology), December 28, 2011.
<https://www.nar.realtor/research-and-statistics/housing-statistics/housing-affordability-index/methodology>.
- Phillips, Matt. “Housing Affordability Collapses at Fastest Clip on Record.” *Axios*, June 7, 2022.
<https://www.axios.com/2022/06/07/housing-affordability-collapse>.
- “Quarterly Residential Vacancies and Homeownership, Third Quarter 2022.” [census.gov](https://usatrade.census.gov/housing/hvs/files/currenthvspress.pdf), November 2, 2022. <https://usatrade.census.gov/housing/hvs/files/currenthvspress.pdf>.
- Smeeding, Timothy. 2012. *Income Wealth and Debt and the Great Recession*. Stanford, CA: Stanford Center on Poverty and Inequality.
- US Census Bureau. “More than 19 Million Renters Burdened by Housing Costs.” [Census.gov](https://www.census.gov/newsroom/press-releases/2022/renters-burdened-by-housing-costs.html), December 8, 2022.
<https://www.census.gov/newsroom/press-releases/2022/renters-burdened-by-housing-costs.html>.
- “U.S. Population 1950-2023.” *MacroTrends*. Accessed December 20, 2023.
<https://www.macrotrends.net/countries/USA/united-states/population>.
- “U.S. Population 1950-2023.” *MacroTrends*. Accessed December 27, 2023.
<https://www.macrotrends.net/countries/USA/united-states/population>.
- Weil, Dan. “Housing Blues Continue to Play: Unaffordable Mortgages.” *TheStreet*. [TheStreet](https://www.thestreet.com/personal-finance/first-time-home-buyers-affordability), July 20, 2022.
<https://www.thestreet.com/personal-finance/first-time-home-buyers-affordability>.